HTML 5

<https://developer.mozilla.org/en/docs/Web/Guide/HTML/HTML5/HTML5_element_list>

<http://html5doctor.com/element-index/>

Browser support

All current browsers, except Internet Explorer 8 and below, support the use of the new HTML5 elements (e.g., <header>, <footer>, <nav>, <article>, <section>, etc.). However, they aren't always mapped to accessibility APIs as the [HTML5 spec](http://www.whatwg.org/specs/web-apps/current-work/multipage/elements.html#wai-aria) requires. Currently [only Firefox does this](http://html5accessibility.com/), but other browsers are implementing the accessibility APIs quickly. In the meantime, [Accessifyhtml5.js](https://github.com/yatil/accessifyhtml5.js) maps them correctly.

The notes below only apply to Internet Explorer 8 and below:

The [html5shiv](http://code.google.com/p/html5shiv/) enables you to use the new HTML5 elements in your markup (and Modernizr does the exact same by default).

1.The New <canvas> Element

|  |  |
| --- | --- |
| Tag | Description |
| <canvas> | Used to draw graphics, on the fly, via scripting (usually JavaScript) |

2.New Media Elements

|  |  |
| --- | --- |
| Tag | Description |
| <audio> | Defines sound content |
| <video> | Defines a video or movie, formats: mp4, mov, webm, ogg |
| <source> | Defines multiple media resources for <video> and <audio> |
| <embed> | Defines a container for an external application or interactive content (a plug-in) |
| <track> | Defines text tracks for <video> and <audio> (caption text, subtitles) .vtt |
| <svg> | Defines an embedded vector image . |
| <math> | Defines a mathematical formula |

<video id="example\_video" class="video-js vjs-default-skin" controls preload="none" width="640" height="264"

poster="http://video-js.zencoder.com/oceans-clip.png"

data-setup="{}">

<source src="http://video-js.zencoder.com/oceans-clip.mp4" type='video/mp4' />

<source src="http://video-js.zencoder.com/oceans-clip.webm" type='video/webm' />

<source src="http://video-js.zencoder.com/oceans-clip.ogg" type='video/ogg' />

<track kind="captions" src="demo.captions.vtt" srclang="en" label="English"></track><!-- Tracks need an ending tag thanks to IE9 -->

<track kind="subtitles" src="demo.captions.vtt" srclang="en" label="English"></track><!-- Tracks need an ending tag thanks to IE9 -->

<p class="vjs-no-js">To view this video please enable JavaScript, and consider upgrading to a web browser that <a href="http://videojs.com/html5-video-support/" target="\_blank">supports HTML5 video</a></p>

</video>

Video players: youtube, video.js, medialelement.js, html5video,

3.New Form Elements

|  |  |
| --- | --- |
| Tag | Description |
| <datalist> | Specifies a list of pre-defined options for input controls |
| <keygen> | Defines a key-pair generator field (for forms) |
| <output> | Defines the result of a calculation |
| <progress> | Represents the completion progress of a task. |
| <meter> | Represents a scalar measurement (or a fractional value), within a known range. |

4.New Semantic/Structural Elements

HTML5 offers new elements for better structure:

|  |  |
| --- | --- |
| Tag | Description |
| <article> | Defines an article |
| <aside> | Defines content aside from the page content |
| <bdi> | Isolates a part of text that might be formatted in a different direction from other text outside it |
| <command> | Defines a command button that a user can invoke |
| <details> | Defines additional details that the user can view or hide |
| <dialog> | Defines a dialog box or window |
| <summary> | Defines a visible heading for a <details> element |
| <figure> | Specifies self-contained content, like illustrations, diagrams, photos, code listings, etc. |
| <figcaption> | Defines a caption for a <figure> element |
| <footer> | Defines a footer for a document or section |
| <header> | Defines a header for a document or section |
| <hgroup> | Groups a set of <h1> to <h6> elements when a heading has multiple levels |
| <mark> | Defines marked/highlighted text |
| <meter> | Defines a scalar measurement within a known range (a gauge) |
| <nav> | Defines navigation links |
| <progress> | Represents the progress of a task |
| <ruby> | Defines a ruby annotation (for East Asian typography) |
| <rt> | Defines an explanation/pronunciation of characters (for East Asian typography) |
| <rp> | Defines what to show in browsers that do not support ruby annotations |
| <section> | Defines a section in a document |
| <time> | Defines a date/time |
| <wbr> | Defines a possible line-break |
| <main> | Defines the main or important content in the document. |

5. Interactive elements

|  |  |
| --- | --- |
| [<details>](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/details) | Represents a widget from which the user can obtain additional information or controls. |
| [<summary>](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/summary) | Represents a summary , caption , or legend for a given <details>. |
| [<menuitem>](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/menuitem) | Represents a command that the user can invoke. |
| [<menu>](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/menu) | Represents a list of commands . |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| HTML elements reminder   |  |  | | --- | --- | | Tag | Description | | Area | Using in image maps | | Base | The base element allows authors to specify the document base URL for the purposes of resolving relative URLs, and the name of the default browsing context for the purposes of following hyperlinks. | | Bdi | The bdi element represents a span of text that is to be isolated from its surroundings for the purposes of bidirectional text formatting. | | Bdo | The bdo element represents explicit text directionality formatting control for its children. It allows authors to override the Unicode bidirectional algorithm by explicitly specifying a direction override. | | Caption | The caption element represents the title of the table that is its parent, if it has a parent and that is a table element. | | Cite | The cite element represents the title of a work (e.g. a book, a paper, an essay, a poem, a score, a song, a script, a film, a TV show, a game, a sculpture, a painting, a theatre production, a play, an opera, a musical, an exhibition, a legal case report, etc). | | Code | The code element represents a fragment of computer code. | |  |  |   API |
| [Server-Sent Events](http://html5doctor.com/server-sent-events/) are real-time events emitted by the server and received by the browser. EventSource.js provides a base fallback and is not dependent on jQuery.  Recommended polyfills: [EventSource.js](https://github.com/remy/polyfills/blob/master/EventSource.js), [jQuery.eventsource](https://github.com/rwldrn/jquery.eventsource) |
| Using the File API added to the DOM in HTML5, it's now possible for web content to ask the user to select local files.  FileReader pairs very well with Drag n Drop to allow for drag 'n drop file uploads, and if neither of those features are present, the fallback of providing an <input type=file> is rather easy. Supported in Chrome, Firefox, Opera. Safari is currently missing FileReader support.  [FileReader](https://github.com/Jahdrien/FileReader) provides useful fallback, based on Flash, jQuery and jQuery UI.  Recommended polyfills: [FileReader](https://github.com/Jahdrien/FileReader) |
| [geolocation shim](https://gist.github.com/366184) uses Google's IP-GeoCoding service as a fallback. [geo-location-javascript](http://code.google.com/p/geo-location-javascript/) doesn't but has hooks into BlackBerry, WebOS, and Google Gears specific APIs. In most cases, you should just not expose Geo features in your app if the feature is not natively present.  Recommended polyfills: [geolocation shim](https://gist.github.com/366184), [geo-location-javascript](http://code.google.com/p/geo-location-javascript/) |
| The History API provides a way for JavaScript to change the URL displayed in the browser without reloading the page. There are several approaches to providing a fallback. The simplest is to fall back to page refreshes. Alternatively, the [History.js](https://github.com/balupton/history.js) plugin smooths out some browser implementation differences and provides an optional hashchange fallback for HTML 4 browsers. GitHub uses [pjax](http://pjax.heroku.com/) (pushState + ajax). |
| The Cash API |
| WEB workers |
| WEB sockets |
|  |